

Title (en)

SINGLE CELL GENE EXPRESSION FOR DIAGNOSIS, PROGNOSIS AND IDENTIFICATION OF DRUG TARGETS

Title (de)

EINZELZELLENGENEXPRESSION ZUR DIAGNOSE, PROGNOSE UND IDENTIFIKATION VON WIRKSTOFFTARGETS

Title (fr)

EXPRESSION DU GÈNE DE CELLULE UNIQUE POUR LE DIAGNOSTIC, PRONOSTIC ET IDENTIFICATION DE CIBLES DE MÉDICAMENTS

Publication

EP 3020830 A1 20160518 (EN)

Application

EP 15003297 A 20100120

Priority

- US 20548509 P 20090120
- EP 10733816 A 20100120

Abstract (en)

Methods are provided for diagnosis and prognosis of disease by analyzing expression of a set of genes obtained from single cell analysis. Classification allows optimization of treatment, and determination of whether or whether to proceed with a specific therapy, and how to optimize dose, choice of treatment, and the like. Single cell analysis also provides for the identification and development of therapies which target mutations and/or pathways in disease-state cells.

IPC 8 full level

C12Q 1/68 (2006.01); **G01N 33/50** (2006.01); **G01N 33/53** (2006.01)

CPC (source: EP KR US)

C12Q 1/6886 (2013.01 - EP KR US); **G01N 33/15** (2013.01 - KR); **G01N 33/5023** (2013.01 - EP KR US); **G01N 33/57484** (2013.01 - KR US); **C12Q 2600/106** (2013.01 - EP KR US); **C12Q 2600/112** (2013.01 - EP KR US); **C12Q 2600/118** (2013.01 - US); **C12Q 2600/136** (2013.01 - EP KR US); **C12Q 2600/158** (2013.01 - US); **C12Q 2600/178** (2013.01 - EP KR US); **G01N 2800/52** (2013.01 - EP KR US)

Citation (applicant)

- TOKIMITSU ET AL., CYTOMETRY, 2007, pages 1003 - 1010
- YAMAMURA ET AL., ANALYTICAL CHEMISTRY, vol. 77, 2005, pages 8050
- FU ET AL., NATURE BIOTECHNOLOGY, vol. 17, 1999, pages 1109
- FU ET AL., ANAL. CHEM., vol. 74, 2002, pages 2451 - 2457
- MARCUS ET AL., ANAL. CHEM., vol. 78, no. 9, 2006, pages 3084 - 3089
- VALERA ET AL., I. NEUROONCOL., vol. 85, no. 1, 2007, pages 1 - 10
- TIBSHIRANI ET AL., P.N.A.S., vol. 99, 2002, pages 6567 - 6572
- MARGULIES ET AL., NATURE, vol. 437, 2005, pages 376 - 380
- BALIS, J. NCCT'L CANCER INST., vol. 94, no. 2, 2002, pages 78
- GOODMAN; GILMAN: "The Pharmacological Basis of Therapeutics, 9TH ED.", 1996, MCGRAW-HILL
- "Chemical Warfare Agents", 1992, ACADEMIC PRESS
- JONES, TRENDS BIOTECHNOL., vol. 17, no. 12, 1999, pages 477 - 481
- AUSUBEL ET AL: "Current Protocols in Molecular Biology", 2000, JOHN WILEY & SONS
- FREEMAN, BIOTECHNIQUES, vol. 26, no. 1, 1999, pages 112 - 225
- KAWAMOTO, GENOME RES, vol. 9, no. 12, 1999, pages 1305 - 1312
- CHEN ET AL., GENOMICS, vol. 51, no. 3, 1998, pages 313 - 324
- TUSHER ET AL., PNAS, vol. 98, 2001, pages 5118 - 5121
- DI CARLO ET AL., LAB CHIP, vol. 6, 2006, pages 1445 - 1449
- MARCUS ET AL., ANAL CHEM, vol. 78, 2006, pages 3084 - 3089

Citation (search report)

- [Y] N. BONTOUX ET AL: "Integrating whole transcriptome assays on a lab-on-a-chip for single cell gene profiling", LAB ON A CHIP, vol. 8, no. 3, 1 January 2008 (2008-01-01), pages 443, XP055035637, ISSN: 1473-0197, DOI: 10.1039/b716543a
- [Y] E. FITZPATRICK: "Microfluidic Techniques for Single-Cell Protein Expression Analysis", CLINICAL CHEMISTRY, vol. 52, no. 6, 30 March 2006 (2006-03-30), pages 1080 - 1088, XP055035639, ISSN: 0009-9147, DOI: 10.1373/clinchem.2005.059014

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010085498 A1 20100729; AU 2010206843 A1 20110811; AU 2010206843 B2 20150129; CN 102333891 A 20120125; EP 2389453 A1 20111130; EP 2389453 A4 20121003; EP 2389453 B1 20151125; EP 3020830 A1 20160518; ES 2560209 T3 20160217; JP 2012515533 A 20120712; KR 20110138340 A 20111227; SG 173048 A1 20110829; US 2010255471 A1 20101007; US 2016312302 A1 20161027; US 9329170 B2 20160503

DOCDB simple family (application)

US 2010021525 W 20100120; AU 2010206843 A 20100120; CN 201080009805 A 20100120; EP 10733816 A 20100120; EP 15003297 A 20100120; ES 10733816 T 20100120; JP 2011546444 A 20100120; KR 20117019125 A 20100120; SG 2011052131 A 20100120; US 201615135702 A 20160422; US 65745710 A 20100120